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16834 U.S. PTO 10/765009

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# UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.

TI-36945

First Inventor

Muhammad Zubair Ikram

Title

A Hybrid IMMSE-LMMSE Receiver Processing Technique And Apparatus For A MIMO WLAN

Express Mail Label No.

ER640661564US

## APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents

## ADDRESS TO:

Assistant Commissioner for Patents  
Box Patent Application  
Washington, DC 20231

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original, and a duplicate for fee processing)
2. ☐ Applicant claims small entity status.  
See 37 CFR 1.27.
3. ☒ Specification [ Total Pages **14** ]  
(preferred arrangement set forth below)
  - Descriptive title of the Invention
  - Cross Reference to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to sequence listing, a table, or a computer program listing appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [ Total Sheets **1** ]
5. Oath or Declaration [ Total Pages **1** ]
  - a. ☒ Newly Executed (original or copy)
  - b. ☐ Copy from a prior application (37 CFR 1.63(d))  
(for continuation/divisional with Box 18 completed)
    - i. ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
6. ☐ Application Data Sheet. See 37 CFR 1.76

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
  - a. ☐ Computer Readable Form (CRF)
  - b. Specification Sequence Listing on:
    - i. ☐ CD-ROM or CD-R (2 copies); or
    - ii. ☐ Paper
  - c. ☐ Statements verifying identity of above copies

## ACCOMPANYING APPLICATION PARTS

9. ☒ Assignment Papers (cover sheet & documents(s))
10. ☐ 37 CFR 3.73(b) Statement (when there is an assignee) ☒ Power of Attorney
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503) (Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s) (if foreign priority is claimed)
16. ☐ Request and Certification under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17. ☐ Other:

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation

☐ Divisional

☐ Continuation-in-part (CIP)

of prior application No: \_\_\_\_\_ / \_\_\_\_\_

Prior application information:

Examiner \_\_\_\_\_

Group / Art Unit: \_\_\_\_\_

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

## 19. CORRESPONDENCE ADDRESS



Customer Number or Bar Code Label



Correspondence address below

NAME

Texas Instruments Incorporated

ADDRESS

CITY

STATE

TX

ZIP CODE

COUNTRY

TELEPHONE

(972) 917-5633

FAX

(972) 917-4418

Name (Print/Type)

Dwight N. Holmbo

Registration No. (Attorney/Agent)

Reg. No. 36,410

Signature

Dwight N. Holmbo

Date

1/26/04

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

## FEE TRANSMITTAL for FY 2004

Patent fees are subject to annual revision

### Complete If Known

|                      |                       |
|----------------------|-----------------------|
| Application Number   | TBD                   |
| Filing Date          | January 26, 2004      |
| First Named Inventor | Muhammad Zubair Ikram |
| Examiner Name        | TBD                   |
| Group Art Unit       | TBD                   |
| Attorney Docket No.  | TI-36945              |

TOTAL AMOUNT OF PAYMENT (\$ **810.00**)

### METHOD OF PAYMENT (check all that apply)

1. ☒ The Commissioner is hereby authorized to charge to the following Deposit Account,

Deposit Account Number

20-0668

Deposit Account Name

Texas Instruments Incorporated

- ☒ Charge any additional fee required or credit any overpayment ☐ Charge all indicated fees and any additional fee required or credit any overpayment

2. ☐ Payment Enclosed:

☐ Check ☐ Money Order ☐ Other

### FEE CALCULATION

#### 1. BASIC FILING FEE

| Large Fee Code | Entity Fee (\$) | Small Fee Code | Entity Fee (\$) | Fee Description        | Fee Paid |
|----------------|-----------------|----------------|-----------------|------------------------|----------|
| 1001           | 770             | 2001           | 385             | Utility filing fee     | \$770    |
| 1002           | 340             | 2002           | 170             | Design filing fee      | \$       |
| 1003           | 530             | 2003           | 265             | Plant filing fee       | \$       |
| 1004           | 770             | 2004           | 385             | Reissue filing fee     | \$       |
| 1005           | 160             | 2005           | 80              | Provisional filing fee | \$       |

SUBTOTAL (1) (\$ **770.00**)

#### 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

|                                   | Extra Claims | Fee from below | Fee Paid |
|-----------------------------------|--------------|----------------|----------|
| Total Claims <b>11</b> -20**=     | <b>0</b>     | <b>18</b>      | <b>0</b> |
| Independent Claims <b>2</b> -3**= | <b>0</b>     | <b>86</b>      | <b>0</b> |
| Multiple Dependent                |              | <b>290</b>     | <b>0</b> |

\*\*or number previously paid, if greater; For Reissue, see below

| Large Fee Code | Entity Fee (\$) | Small Fee Code | Entity Fee (\$) | Fee Description   |
|----------------|-----------------|----------------|-----------------|---|
| 1202           | 18              | 2202           | 9               | Claims in excess of 20                                    |
| 1201           | 86              | 2201           | 43              | Independent Claims in excess of 3                         |
| 1203           | 280             | 2203           | 140             | Multiple dependent claims in excess of 3                  |
| 1204           | 86              | 2204           | 43              | **Reissue independent claims over original patent         |
| 1205           | 18              | 2205           | 9               | **Reissue claims in excess of 20 and over original patent |

SUBTOTAL (2) (\$ **0.00**)

### FEE CALCULATION (continued)

#### 3. ADDITIONAL FEES

| Large Fee Code | Entity Fee (\$) | Small Fee Code | Entity Fee (\$) | Fee Description   | Fee Paid |
|----------------|-----------------|----------------|-----------------|---|----------|
| 1051           | 130             | 2051           | 65              | Surcharge - late filing fee   |          |
| 1052           | 50              | 2052           | 25              | Surcharge - late provisional filing fee or cover sheet.                   |          |
| 1053           | 130             | 1053           | 130             | Non-English specification   |          |
| 1812           | 2,520           | 1812           | 2,520           | For filing a request for reexamination                                    |          |
| 1804           | 920*            | 1804           | 920*            | Requesting publication of SIR prior to Examiner action                    |          |
| 1805           | 1,840*          | 1805           | 1,840*          | Requesting publication of SIR after Examiner action                       |          |
| 1251           | 110             | 2251           | 55              | Extension for reply within first month                                    |          |
| 1252           | 420             | 2252           | 210             | Extension of time within second month                                     |          |
| 1253           | 950             | 2253           | 475             | Extension of time within third month                                      |          |
| 1254           | 1,480           | 2254           | 740             | Extension of time within fourth month                                     |          |
| 1255           | 2,010           | 2255           | 1,005           | Extension of time within fifth month                                      |          |
| 1401           | 330             | 2401           | 165             | Notice of Appeal  |          |
| 1402           | 330             | 2402           | 165             | Filing a brief in support of an appeal                                    |          |
| 1403           | 290             | 2403           | 145             | Request for oral hearing  |          |
| 1451           | 1,510           | 1451           | 1,510           | Petition to institute a public use proceeding                             |          |
| 1452           | 110             | 2452           | 55              | Petition to revive - unavoidable  |          |
| 1453           | 1,330           | 2453           | 665             | Petition to revive - unintentional  |          |
| 1501           | 1,330           | 2501           | 665             | Utility issue fee (or reissue)  |          |
| 1502           | 480             | 2502           | 240             | Design issue fee  |          |
| 1503           | 640             | 2503           | 320             | Plant issue fee   |          |
| 1460           | 130             | 1460           | 130             | Petitions to the Commissioner   |          |
| 1807           | 50              | 1807           | 50              | Processing fee for provisional applications                               |          |
| 1806           | 180             | 1806           | 180             | Submission of Information Disclosure Stmt.                                |          |
| 8021           | 40              | 8021           | 40              | Recording each patent assignment per property (time number of properties) | \$40     |
| 1809           | 770             | 2809           | 385             | Filing a submission after final rejection (37 CFR 1.129(a))               |          |
| 1810           | 770             | 2810           | 385             | For each additional invention to be examined (37 CFR 1.129(b))            |          |

Other fee (specify) \_\_\_\_\_

Other fee (specify) \_\_\_\_\_

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) **\$40**

#### SUBMITTED BY

Typed or Printed Name

Dwight N. Holmbo

Signature

*Dwight N. Holmbo*

Date

1/26/2004

#### Complete (if applicable)

Reg. Number

36,410

Deposit Account User ID

N/A